

JAVA.UTIL.SCANNER CLASS

http://www.tutorialspoint.com/java/util/java_util_scanner.htm

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Introduction

The **java.util.Scanner** class is a simple text scanner which can parse primitive types and strings using regular expressions. Following are the important points about Scanner:

- A Scanner breaks its input into tokens using a delimiter pattern, which by default matches whitespace.
- A scanning operation may block waiting for input.
- A Scanner is not safe for multithreaded use without external synchronization.

Class declaration

Following is the declaration for **java.util.Scanner** class:

```
public final class Scanner
    extends Object
    implements Iterator<String>
```

Class constructors

S.N.	Constructor & Description
1	Scanner(File source) This constructs a new Scanner that produces values scanned from the specified file.
2	Scanner(File source, String charsetName) This constructs a new Scanner that produces values scanned from the specified file.
3	Scanner(InputStream source) This constructs a new Scanner that produces values scanned from the specified input stream..
4	Scanner(InputStream source, String charsetName) This constructs a new Scanner that produces values scanned from the specified input stream.
5	Scanner(Readable source) This constructs a new Scanner that produces values scanned from the specified source.
6	Scanner(ReadableByteChannel source) This constructs a new Scanner that produces values scanned from the specified channel.
7	Scanner(ReadableByteChannel source, String charsetName) This constructs a new Scanner that produces values scanned from the specified channel.
8	Scanner(String source) This constructs a new Scanner that produces values scanned from the specified string.

Class methods

S.N.	Method & Description
1	<u>void close()</u> This method closes this scanner.
2	<u>Pattern delimiter()</u> This method returns the Pattern this Scanner is currently using to match delimiters.
3	<u>String findInLine(Pattern pattern)</u> This method attempts to find the next occurrence of the specified pattern ignoring delimiters.
4	<u>String findInLine(String pattern)</u> This method attempts to find the next occurrence of a pattern constructed from the specified string, ignoring delimiters.
5	<u>String findWithinHorizon(Pattern pattern, int horizon)</u> This method attempts to find the next occurrence of the specified pattern.
6	<u>String findWithinHorizon(String pattern, int horizon)</u> This method attempts to find the next occurrence of a pattern constructed from the specified string, ignoring delimiters.
7	<u>boolean hasNext()</u> This method returns true if this scanner has another token in its input.
8	<u>boolean hasNext(Pattern pattern)</u> This method returns true if the next complete token matches the specified pattern.
9	<u>boolean hasNext(String pattern)</u> This method returns true if the next token matches the pattern constructed from the specified string..
10	<u>boolean hasNextBigDecimal()</u> This method returns true if the next token in this scanner's input can be interpreted as a BigDecimal using the nextBigDecimal() method.
11	<u>boolean hasNextBigInteger()</u> This method returns true if the next token in this scanner's input can be interpreted as a BigInteger in the default radix using the nextBigInteger() method.
12	<u>boolean hasNextBigInteger(int radix)</u> This method returns true if the next token in this scanner's input can be interpreted as a BigInteger in the specified radix using the nextBigInteger() method.
13	<u>boolean hasNextBoolean()</u> This method returns true if the next token in this scanner's input can be interpreted as a boolean value using a case insensitive pattern created from the string "truefalse".
14	<u>boolean hasNextByte()</u> This method returns true if the next token in this scanner's input can be interpreted as a byte value in the default radix using the nextByte() method..
15	<u>boolean hasNextByte(int radix)</u> This method returns true if the next token in this scanner's input can be interpreted as a byte value in the specified radix using the nextByte() method..

16	<u>boolean hasNextDouble()</u> This method returns true if the next token in this scanner's input can be interpreted as a double value using the <code>nextDouble()</code> method.
17	<u>boolean hasNextFloat()</u> This method Returns true if the next token in this scanner's input can be interpreted as a float value using the <code>nextFloat()</code> method.
18	<u>boolean hasNextInt()</u> This method returns true if the next token in this scanner's input can be interpreted as an int value in the default radix using the <code>nextInt()</code> method.
19	<u>boolean hasNextInt(int radix)</u> This method returns true if the next token in this scanner's input can be interpreted as an int value in the specified radix using the <code>nextInt()</code> method.
20	<u>boolean hasNextLine()</u> This method returns true if there is another line in the input of this scanner.
21	<u>boolean hasNextLong()</u> This method returns true if the next token in this scanner's input can be interpreted as a long value in the default radix using the <code>nextLong()</code> method.
22	<u>boolean hasNextLong(int radix)</u> This method returns true if the next token in this scanner's input can be interpreted as a long value in the specified radix using the <code>nextLong()</code> method.
23	<u>boolean hasNextShort()</u> This method returns true if the next token in this scanner's input can be interpreted as a short value in the default radix using the <code>nextShort()</code> method.
24	<u>boolean hasNextShort(int radix)</u> This method returns true if the next token in this scanner's input can be interpreted as a short value in the specified radix using the <code>nextShort()</code> method.
25	<u>IOException ioException()</u> This method returns the <code>IOException</code> last thrown by this Scanner's underlying <code>Readable</code> .
26	<u>Locale locale()</u> This method returns this scanner's locale.
27	<u>MatchResult match()</u> This method returns the match result of the last scanning operation performed by this scanner.
28	<u>String next()</u> This method finds and returns the next complete token from this scanner..
29	<u>String next(Pattern pattern)</u> This method returns the next token if it matches the specified pattern..
30	<u>String next(String pattern)</u> This method returns the next token if it matches the pattern constructed from the specified string..
31	<u>BigDecimal nextBigDecimal()</u> This method scans the next token of the input as a <code>BigDecimal</code> .
32	<u>BigInteger nextBigInteger()</u>

	This method Scans the next token of the input as a BigInteger.
33	<u>BigInteger nextBigInteger(int radix)</u> This method scans the next token of the input as a BigInteger.
34	<u>boolean nextBoolean()</u> This method scans the next token of the input into a boolean value and returns that value.
35	<u>byte nextByte()</u> This method scans the next token of the input as a byte.
36	<u>byte nextByte(int radix)</u> This method scans the next token of the input as a byte.
37	<u>double nextDouble()</u> This method scans the next token of the input as a double.
38	<u>float nextFloat()</u> This method scans the next token of the input as a float.
39	<u>int nextInt()</u> This method scans the next token of the input as an int.
40	<u>int nextInt(int radix)</u> This method scans the next token of the input as an int.
41	<u>String nextLine()</u> This method advances this scanner past the current line and returns the input that was skipped.
42	<u>long nextLong()</u> This method scans the next token of the input as a long.
43	<u>long nextLong(int radix)</u> This method scans the next token of the input as a long.
44	<u>short nextShort()</u> This method scans the next token of the input as a short.
45	<u>short nextShort(int radix)</u> This method scans the next token of the input as a short.
46	<u>int radix()</u> This method returns this scanner's default radix..
47	<u>void remove()</u> The remove operation is not supported by this implementation of Iterator.
48	<u>Scanner reset()</u> This method resets this scanner.
49	<u>Scanner skip(Pattern pattern)</u> This method skips input that matches the specified pattern, ignoring delimiters.
50	<u>Scanner skip(String pattern)</u> This method skips input that matches a pattern constructed from the specified string.
51	<u>String toString()</u>

	This method returns the string representation of this Scanner.
52	<u>Scanner useDelimiter(Pattern pattern)</u> This method sets this scanner's delimiting pattern to the specified pattern.
53	<u>Scanner useDelimiter(String pattern)</u> This method sets this scanner's delimiting pattern to a pattern constructed from the specified String.
54	<u>Scanner useLocale(Locale locale)</u> This method sets this scanner's locale to the specified locale.
55	<u>Scanner useRadix(int radix)</u> This method Sets this scanner's default radix to the specified radix.

Methods inherited

This class inherits methods from the following classes:

- java.util.Object